Finding Inverses

**Example 1.** Given the function f(x)=3x-2, find its inverse.

Step 1: Replace f(x) with y.

Step 2: Replace all x’s with y and all y’s with x.

Step 3: Solve for y.

Step 4: Replace y with f-1(x).

We have found the inverse of the function f(x)=3x-2 is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Example 2.** Given the function f(x)= x+ 4, find its inverse.

Step 1: Replace f(x) with y.

Step 2: Replace all x’s with y and all y’s with x.

Step 3: Solve for y.

Step 4: Replace y with f-1(x).

We have found the inverse of the function f(x)= x+ 4 is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.